

IN THE DRAWINGS:

Please replace the current drawing sheets with the accompanying drawing sheets,
which are formal versions thereof.

REMARKS

By the accompanying drawing revisions, Applicants have eliminated the bases for the drawing objections.

By the foregoing claim amendments, Applicants have canceled claims 9-12, 14, 28, 32, 34-36, 44, and 44. They have also revised independent claims 1, 23, 30, and 31, and 47 to clarify the “without driving” feature that each of those claims included as well as modify other features’ recitations. Additionally, they have revised numerous other claims to adjust dependencies in such a manner that dependent claims that recite method features depend on method claims and to make claims directed to coupler features depend on claims that recite couplers. Finally, they have added new claims 54-63 to provide an appropriate range of claim scopes. The claims remaining after these amendments’ entry are claims 1-7, 13, 15-17, 19, 21-23, 27, 29-31, 33, 37-43, and 45-63.

As Applicants explained in the specification’s paragraph [0021] and previous responses, they recognized that they could overcome ringing-caused problems in short-distance time-difference-reflectometry (“TDR”) measurements by “using electrically-separate transmit and receive conductive elements”: the conductive element to which the transmitter is coupled is electrically separate from the one to which the receiver is coupled. It is true, as Applicants point out in the sentence bridging their specification’s pages 11 and 12, that the transmitter’s driving its conductive element can cause unwanted signals to appear on the receiver’s conductive element even in the absence of the reflection whose

resultant signal's timing at the receiver is to be the basis for the reflectometry measurement. What Applicants recognized, though, is that such unwanted signals' magnitudes tend to be much smaller than those in conventional TDR systems, in which the transmitter and receiver are coupled to the same conductive element. As a consequence, Applicants' invention enables TDR to be usable for distances too short for traditional TDR systems.

In the Office action of August 4, 2006, the Examiner rejected claims directed to this concept on the grounds that, since there would be some capacitive coupling between the first and second conductive elements, the "without driving the second conductive element" language used in the previously submitted claims describes something that Applicants did not teach.

Of course, what Applicants meant was what those skilled in this art would ordinarily have understood Applicants' language to mean, i.e., that the driver does not drive the second conductive element directly, by conductive coupling. The accompanying amendments make that intent clear. Additionally, Applicants have canceled claims 14 and 36, which the Examiner also rejected on § 114 grounds.

In short, Applicants have removed the grounds for all rejections and objections.
They therefore ask that the Examiner pass the application to issue at an early date.

Respectfully submitted,

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